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Both Sides of the Coin: Supporting Postgraduates and Researchers in Dedicated Spaces at CPUT and Stellenbosch University

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Abstract

The idea of a space dedicated to supporting research at the university housed within the library is not a new concept. These spaces, often called Research Commons, have been written about widely in literature since 2008. However the impact of these spaces is something that, a decade later, warrants investigation as these spaces have also had to evolve to both meet clients changing needs and to reflect the new trends within libraries.

In South Africa, the Research Commons is a well-known concept within university libraries. Both the Cape Peninsula University of Technology (CPUT) and the Stellenbosch University Libraries offer such dedicated spaces in the libraries for postgraduates and researchers to work in. This paper looks closely at these spaces in the two institutions, specifically looking at the commonalities of a research support space, both in set-up and use, from the perspective of a research intensive university and a teaching and learning focused University of Technology. In addition, the differences and suggested causes for the differences are also discussed, with a special reference to the evolution of these spaces from the time of inception until the current day. Particular attention will be paid to the actual usage and services of the different spaces.

This study, comparing the approaches to providing excellent spaces for postgraduates and researchers in the libraries of two different styles of University, will resonate both with librarians from research traditional universities, as well as Universities and Universities of Technology aspiring to become more research-focused.

1 Introduction

1.1 Research support in libraries

1.1.1 Research support as a trend in literature

Over the last decade, research support has grown as a trend within the literature, as the focus of libraries has shifted towards demonstrating value on campus (Oakleaf, 2010). For the purposes of this article, the definition of 'research support', as defined by Parker (2012), will be used, which is the "library's role in assisting to increase the productivity of research and scholarship, will be used. This trend has focused on new spaces, such as Research Commons where the aim is to be a research conducive environment, as well as new services, such as bibliometrics, research data management and various aspects of open access and publishing services (Kennan, Corral, & Afzal, 2014).

A number of authors have written about research support within their libraries. From the Australian libraries, Parker (2012), Keller (2015) and Haddow & Mamtara (2017) have all written about the evolving nature of research support within the library – from strengthening the visibility of the library in terms of open access support, to creating specialist positions such as research data management and bibliometrics specialists. From the UK perspective, the RLUK report, *Re-skilling for Research*, investigated the skills needed by librarians to be able to sufficiently support researchers at their institutions and compiled a list of 32 key skill areas that would be needed (Auckland, 2012).

In the South African context, Raju & Schoombee (2014) have written about the open access aspect of research support, specifically that of creating an institutional repository and focusing on gold open access. De Jager, Crowster, Nassimbeni (2016) have recently investigated the idea of a “research librarian” in a South African context, where specific librarians received further training in order to strengthen skills that were perhaps missing in order to support researchers.

1.1.2 Facets of research support

It is well-documented that the role of a library on campus is to support both research and learning at its university (Kennan et al., 2014; Oakleaf, 2010). When looking at research support, a few studies have been mentioned above that have focused on the evolving nature, but the most important aspect of research support that needs to be mentioned is the library’s role from being support to being a partner in the research process, using the knowledge and skills of librarians in the information sphere to be able to work with researchers (Tise, Raju, & Adam, 2015).

Within the literature, there are three main facets of research support that can be broadly divided in to the following new services: research impact (which includes bibliometric services); scholarly communication (which includes open access publishing and repositories); and, research data services (which includes research data management).

Research impact is a trend that focuses on using metrics (such as bibliometrics and altmetrics) on assisting to measure research productivity and impact at the university, using tools such as citation databases that librarians were familiar with (Corrall, Kennan, & Afzal, 2012, 2013; Kennan et al., 2014). This allows librarians to be able to use their expertise to be able help researchers in measuring their impact in a real-world context in terms of not only citations, but also user engagement with their work.

Scholarly communication focuses on the nature of publishing, primarily becoming a trend through open access initiatives such as institutional repositories which allow researchers to upload their work into an online space that can be freely accessed (Hansson & Johannesson, 2013; Sewell & Kingsley, 2017; Shapiro, 2015). This has of course also led to the library playing a role in supporting

journals that rely on open access infrastructure, as well as in advising researchers as to their copyright agreements (Carroll, 2006; Lang, Wilson, Wilson, & Kirkpatrick, 2018).

Research data services have developed within libraries in more recent years, spurred on not only by evolving technologies but also through the push from the research community to make research data more transparent and accessible as the open access movement starts to affect research data as well (Kennan et al., 2014). Research data management is the service that most libraries seem to focus on, as the process of curation and archiving of information is not new to librarians, but now the focus is on the material being data (Corrall et al., 2013; Lang et al., 2018).

These three main facets of research support have resulted in specialist roles being created within libraries – functional specialists that work alongside subject or faculty librarians in order to be able to effectively deliver such services (Jaguszewski & Williams, 2013). In some cases, these librarians are placed within a single space such as a Research Commons in order to allow for the expertise to be concentrated in the most likely space (Daniels, Darch, & Jager, 2010).

1.2 Space design

Within the Research cycle, the library can offer a variety of services to those engaged in research and, in many cases, libraries in academic institutions have responded to the challenge. But in terms of what the researchers themselves, in the form of the postgraduate students, see as the most important service it is significant that research has shown that this is the research commons, or dedicated research space (Seema & Aigbavboa, 2017). Explanations given for this include the specialised nature of the environment within the research commons which facilitates the necessary research skills gain, as well as enhancing the ability to identify those resources which are most pertinent to research, as opposed to supporting undergraduate learning.

In the South African context, many academic libraries have adopted the model of a postgraduate centre (whether called Research Commons, or Research Information Support Centre, as in the two case studies used in this paper). This is therefore space that is designed to enable the postgraduate student not only to function more effectively but, particularly significant in the South African Higher Education segment due to the insistence on throughput rate, completing their studies within the appropriate time span (Seema & Aigbavboa, 2017).

As the concept of space is often seen as becoming redundant with regard to services in academic institutions in the fourth industrial revolution, even within libraries (University of Johannesburg, 2018), it may be surprising that the Research Commons is still seen as important in terms of space. The basis of this lies in the fact that, despite the 4th industrial revolution being seen as having only a technological base driving this revolution, actual most significant factor for higher education is that “students’ needs should be met effectively” (Xing & Marwala, 2017). Space in terms of a research commons is therefore not an outmoded concept, but one that can be used to meet the demands of

the postgraduate students. This demand, as far as the library is concerned, is rooted in the idea of creating an all-round educational experience, as reflected in the services outlined as part of the users' needs.

To do this effectively then we need an understanding of what these needs are and what can be used to meet these. Two key techniques are in play here that have emerged in recent times in libraries – user experience techniques (UX) and, incorporating elements of user experience, participative design which, in the context of spaces, is particularly effective as a technique is very useful in this context (Foster, 2012).

Both of the institutions whose centres are discussed are users of continuous monitoring and evaluation so as to ensure that the services and the space meet the users' demands. Within these centres, then, there is an emphasis on ensuring that users' needs are met effectively, both in terms of technological provision, but, more importantly, in terms of the human component necessary to allow this. The space therefore, is not only one that has come quite a way already, in terms of time, but is geared to look towards the future.

2 Case 1: University of Stellenbosch Research Commons

Stellenbosch University was recognised as a university in 1918, just over a hundred years ago, and started out with four faculties, namely Science, Education, Arts and Social Sciences, and AgriSciences. Today, the university is home to ten faculties and just over 31 000 students enrolled, with more than 10 000 of these students being in postgraduate programmes.

Table 1: Number of postgraduate students enrolled over the last ten years at Stellenbosch University, and the percentage that it makes up of the total student population

Year	Postgraduate	Total students	% Postgraduate
2009	9 233	26 243	35,2%
2010	10 043	27 694	36,3%
2011	10 043	28 193	35,6%
2012	9 853	27 823	35,4%
2013	9 753	28 156	34,6%
2014	10 119	29 393	34,4%
2015	10 051	30 150	33,3%
2016	10 154	30 854	32,9%

Year	Postgraduate	Total students	% Postgraduate
2017	10 440	31 639	33,0%
2018	10 506	31 765	33,1%

The Stellenbosch University Library and Information Services (SULIS) launched the Carnegie Research Commons in 2011, after being built as part of the Carnegie Corporation of New York (CCNY)'s project called the Research Libraries Consortium in South Africa (Stellenbosch University Library and Information Services, 2017). This funding allowed the development of the Research Commons into a "high-level research environment intended for use by postgraduate students at masters and doctoral level, as well as academic staff and researchers at Stellenbosch University." (Stellenbosch University and Library Information Services, 2017).

The Research Commons is equipped with 33 workstations, which have PCs, as well as a small computer lab which houses another 5 PCs. There are 4 seminar rooms available, two of which are used as overflow seating when the facility is full, and two which are used through bookings only for larger groups and video conferences. There is a lounge, which has seating available on its couches and at two smaller desks. The lounge also has a refreshment station. It should be noted that the space is reserved only for postgraduate students at Masters Level and PhD level, as well as staff of the University.



Figure 1: A view of the Research Commons from the outside, specifically the desks with the workstations and then the seminar rooms on the right hand sides

Students are able to give staff feedback on a whiteboard in the Research Commons, which allows staff to follow up any issues, and identify user needs. These can vary from IT and maintenance issues, such as Wifi problems, equipment wanted by users, or just general comments.

Originally with two full time staff members on hand, the Research Commons has grown to having three full time staff members on hand to be able to give assistance to the students as needed – one senior librarian / manager and one librarian (both originally called Research Support librarians), as

well as one assistant librarian. The services given by these librarians were sketched out in the Operational Services plan created at the inception of the Research Commons and can be divided into three categories:

- 1) General services – including answering basic reference queries, library-based IT queries (such as the institutional repository) and software queries. This also includes referrals to faculty librarians as the subject specialists for more in-depth library assistance.
- 2) Research-related services- proposal writing, grant writing, journal impacts and other metrics and referrals to other staff within the library (such as digital scholarship) or other facilities on campus (such as the writing laboratory)
- 3) Basic IT services - including issues such as scanning, printing and general troubleshooting

Over time, the role of the Senior Librarian: Research Support has grown into Manager: Research Impact and Research Commons, where this librarian is also responsible for coordinating and working with other library staff members on research impact matters such as bibliometrics. Furthermore, the planning and coordination of a postgraduate training programme is done by the Manager: Research Impact and Research Commons and includes items such as advanced MS Word Training and Mendeley training. The role of assistant librarian was recently added to replace the use of student assistants within the space, where the assistant librarian is on hand to assist with the first level of queries. Within the library, the staff of the Research Commons work with the Faculty librarians – referring queries to them where needed, and assisting with research impact queries – as well as other functional divisions within the library such as Digital Scholarship and Research Data Services. The method of service delivery from the Research Commons is done both in person and digitally, with proactive services and marketing taking place on mediums such as the Library Research News blog as well as social media sites. Examples of the Research Commons' partnerships with other support services on campus can be seen in the collaboration with the writing laboratory – the Research Commons provides space for a writing consultant to be positioned within the space twice a week so that postgraduate students are able to consult them.

Since the inception of the Research Commons, statistics have been kept of the clients' usage of the space through hourly counts which are then uploaded and saved onto a shared drive. For this paper, the average hourly usage over a six year period was investigated (from 2013-2018) to determine the use. The space on average can hold seating for about 50 students (including the Computer Lab PCs, but excluding the seminar rooms). It can be seen in Figure 2 that the average number of students ranges in the high 20s, almost 30, for the six year period.

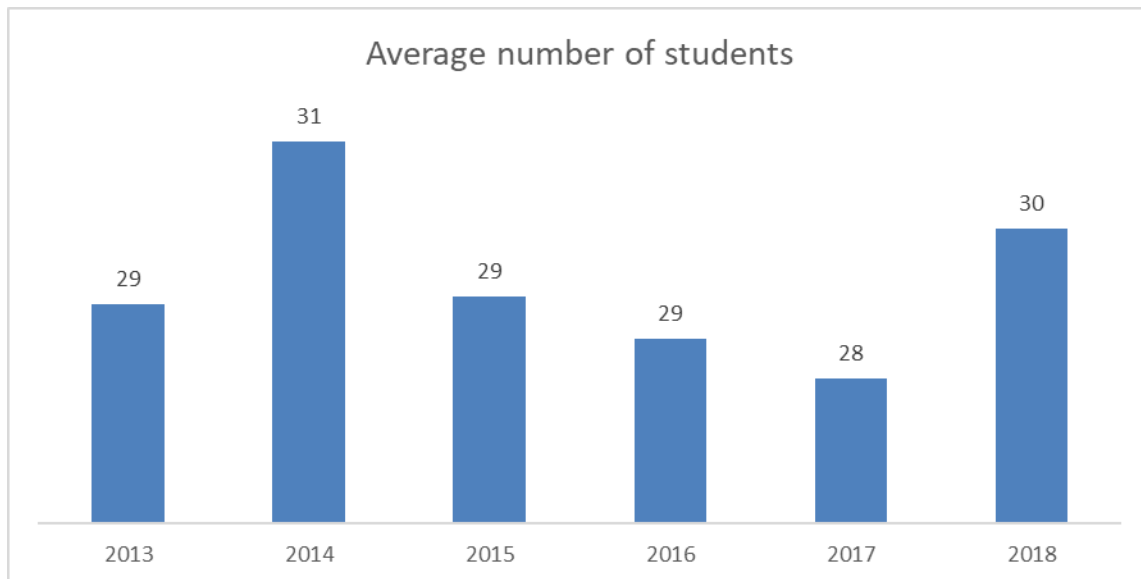


Figure 2: The average number of students in the Research Commons per hour over the years 2013-2018 on Mondays to Fridays from 8am until 5pm.

A 'snapshot' of the type of usage of the space per month can be seen in the figure below over the same six year period, with the yearly comparisons. The month of March was selected as this month is generally during term time, and is usually a busy month for postgraduate students as the registration period has passed. Statistically, students prefer to use the space for work on PCs and laptops, with few students working without a device at all. The role of technology in such a space, and the ability of the staff to assist with technology is therefore very important, and thus the emphasis on IT in the services offered makes sense.

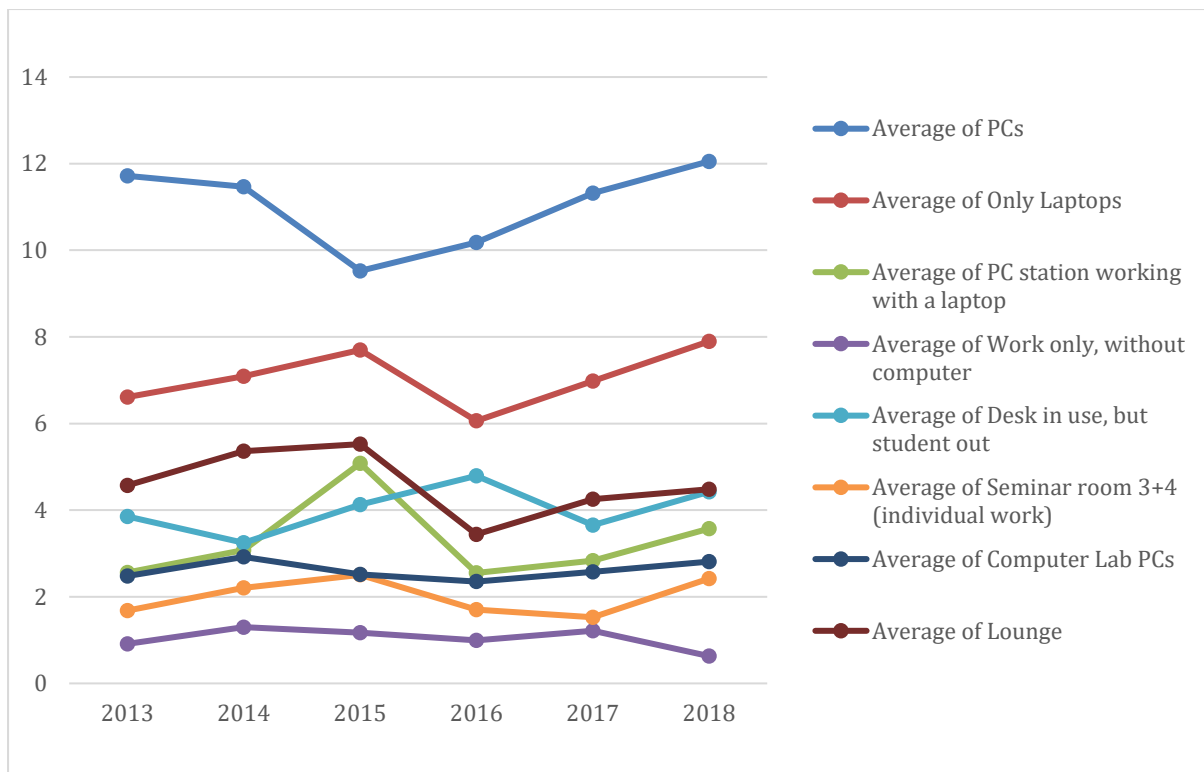


Figure 3: A snapshot of the use of the space in the month of March across all six years investigated. This reflects the average number of users per hour in each space, from Monday to Fridays 8am until 5pm.

Pictured differently, the overall use of the research commons can be seen to be focused on the use of working with PCs or laptops (Figure 4).

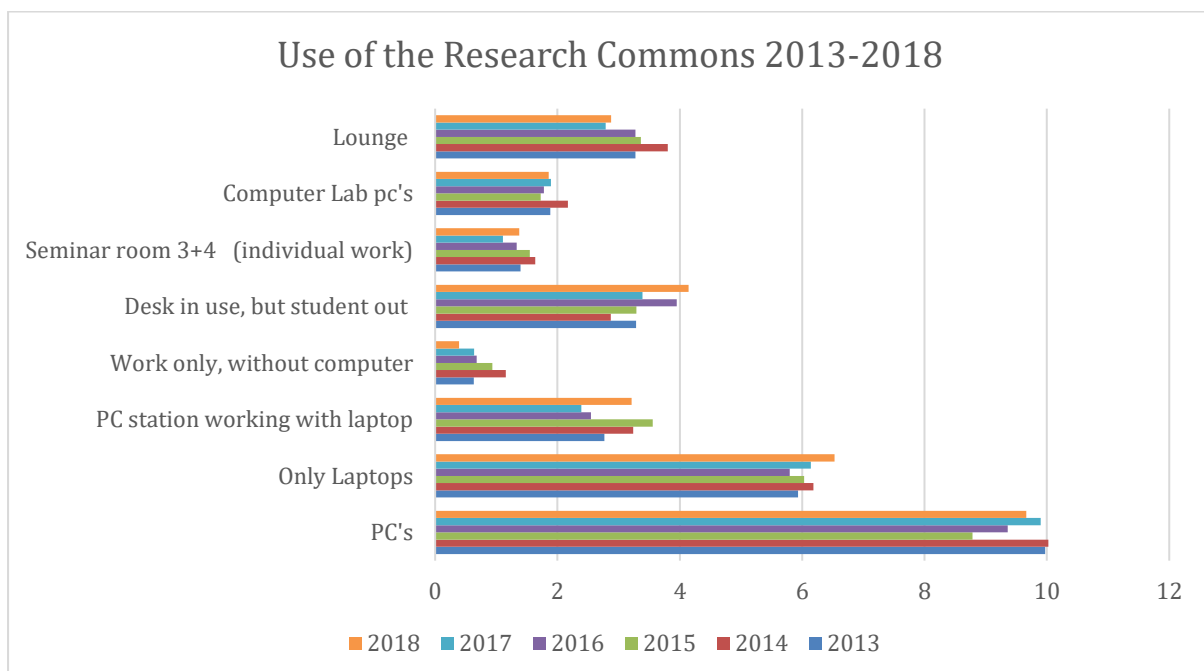


Figure 4: The use of the Research Commons per year showing the average amount of students per hour on Mondays – Fridays 8am to 5pm.

The aim of the Research Commons, as stated on its website, “... is to enhance the Library's contribution to postgraduate throughput and research output by providing an environment conducive to research, and offering services which directly support research endeavours of postgraduate students and researchers.”

With the consistent usage of the space, as shown above, it can be seen that the Stellenbosch Research Commons provides a space that students continue to work in yearly, thus giving a space to postgraduate students to be able to work effectively on their studies.

3 Case 2: Cape Peninsula University of Technology

The Cape Peninsula University of Technology is a relatively new institution in the Western Cape province of South Africa, having been formed from the amalgamation of the Peninsula and Cape Technikons in 2005. It is a multi-campus institution, with its two largest campuses being the previous headquarter campuses of the Technikons in Bellville and in Cape Town, some 30 kilometres apart. Post-merger the institution has undergone a process of consolidating faculties onto specific campuses, with the Faculty of Business and Management Sciences and the Faculty of Informatics and Design being the two largest on the Cape Town campus, now known as the District 6 campus.

Prior to the merger the two Technikons had been starting out on the road to having a postgraduate student corps, as the number of theses and dissertations shows.

Years	Theses	Per year	Notes
1983-1989	21	3	
1990-1999	153	15.3	
2000-2009	506	50.6	CPUT founded 2005
2010-2019	1241	124.1	

This shows the increased output of postgraduate students, but, to put it into perspective, the University of Stellenbosch lists 569 for 2019 alone –as per their ETD site on 10 June 2019 (www.scholar.sun.ac.za). Although the Technikons did not initially have a postgraduate component, this changed in the 1990's and, since the change in the Higher Education landscape in South Africa in 2005, the National Department of Higher Education has tasked all universities in South Africa to pursue both Teaching & Learning (by which is commonly understood the Undergraduate Programs and teaching components of postgraduate programs) as well as Research (including postgraduate studies requiring a research component)

These drivers led to an increase in postgraduate students, particularly at the District 6, led to an increasing realisation that specialized support was needed and in 2001 the Cape Technikon opened

its Research Information Support Centre on its Cape Town campus. Satisfaction surveys (LibQual, 2008) done in 2008 had a very positive response from the postgraduate students about the staff in the postgraduate section:

"I use the postgraduate section daily and the staff in this section are very professional, friendly and helpful"

"Postgraduate section is the best and the staff are fantastic and knowledgeable"

But there was a less enthusiastic response to the actual space and facility:

"If not offered already the library should have a Wi-Fi zone so that user could access the internet with their laptops."

"The postgraduate section takes too long to get revamp"

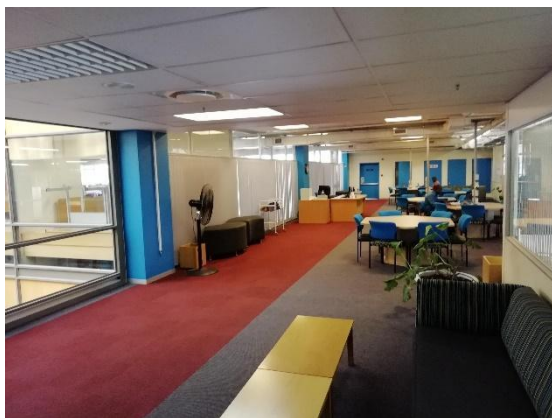
"The aircon can be a bit cold at times making it uncomfortable"

"Developments take too long to finish, and a bit overcrowded sometimes"

"More improvement needed"

Although individual items such as the air conditioning and Wi-Fi zone could be addressed in the existing centre, there was a realization that a new centre would be needed. This was also spurred by the growth in Postgraduate students at District 6, which is the campus which has the highest number as well the largest number of full-time postgraduate students led to the realization that the facility was becoming too small. The consolidation of all the Business and Management Students to District 6 was a further factor as the Engineering and Science postgraduates, in particular, tend to make more use of laboratory facilities within the Faculties. Unfortunately, this did require not only time, but also the identification of a suitable space, and funding. The space was identified and initial funding secured during 2014/5, but the student unrest of 2015 and 2016 put a halt to developments.

However, during 2017 and 2018, the RISC facility was redesigned and moved from the library level 4 to level 3 to create a new centre. Those facets identified by another local university (including low noise levels, temperature control, good lighting, better quality furniture, seminar rooms, select literature and kitchen) (Darch 2006) as being necessary for such a space were discussed with postgraduate students at District 6 and those mutually agreed upon were then taken into in looking at the new centre.



The centre has a large open plan area incorporating printers and a dedicated service desk, a computer area, training room, 2 offices, one being used as a breakaway and one by the Research and Scholarly Communication Librarian, an Inter-Library Loan centre – and a kitchen! It should be noted that although the office of the Research and Scholarly Communication librarian is within RISC, the staff member's responsibility is primarily to facilitate the support of researchers and postgraduate students by the faculty librarians and faculty support teams.

The use of this area was originally very similar to that of the previous, much smaller RISC. Postgraduate students would work at computer workstations, or in areas with Wi-Fi, ask advice from

the dedicated service desk and consult the small selected selection of Research Methodology works. The dedicated desk was staffed by an experienced para-professional who could deal with most queries regarding facilities, basic searching, referencing and library services. If the question or support needed was more specific, faculty-based or required a higher level of experience then the Faculty Librarian would be contacted so as to offer the necessary support.

In the new centre this has been refined to include the Research Librarian in the Centre. This librarian can better assess the need and assist the student as to where to go for advice and support – this could be the Faculty Librarian, but could also include CPUT's statisticians (for whom the second office is reserved), the supervisor or the Centre for Postgraduate Students.

Besides the addition of the kitchen facilities, the presence of an ILL person in the RISC facilitates the request for material from elsewhere and thus the library has a broad range of support people immediately available. Additional facilities such as the training room, where the library, the Research Directorate and individual faculties can offer sessions and the small breakaway room are already being used for these new purposes. And from all this there has been an interesting development with the students themselves taking the lead in arranging an informal Wednesday discussion group, with students from all faculties, to discuss problems, tips and interesting ideas around research and their own research topics.

It is too early to get significant longitudinal statistics, but the function of this RISC is best summed up by our present Vice-Chancellor, who said on being introduced to the facility, "Now there is no excuse for not studying here at CPUT!"

4 Conclusions

The use of the spaces designated for postgraduate use in the SULIS and the CPUT library at the District 6 campus in Cape Town illustrate the value of dedicated space to this category of student. In terms of Stellenbosch we see the use of the space for working on PC's (now, naturally moving more towards using laptops with Wi-Fi), and a lesser need for using other facets of the space such as the lounge and the meeting rooms. However both SULIS, evidenced through its Operational services Plan, and CPUT, through the comments of the students and the increase in accessible staff, show that a key driver of the effective usage of space is actually the services offered by and accessible through the staff within the space.

Services mentioned in the introduction to this paper are now typically offered within the ambit of the dedicated postgraduate spaces such as these. A main difference lies in the approach to the staffing in these areas to be able to offer these services. Within SULIS, dedicated professional staff are placed within the centre to be able to offer support across all facets within the research cycle likely to be needed (again, as shown in the Operational Services Plan). CPUT, on the other hand, has used the placement of staff performing specific functions for the entire library service within the space as a means of extending some of the services. Thus although there is a dedicated para-professional at CPUT to handle most of what Stellenbosch called general services and IT services, as well as lesser support for research-based services, the presence of the Research Support Librarian, although not primarily there to support individual researchers, does serve to strengthen this.

In this study we compare two contrasting institutions: a research-focused traditional university with at least 30% postgraduate students, and STEM and Humanities components of equal importance and

balance, and a University of Technology with a fledgling research component, less than 10% postgraduate component and an emphasis on STEM and, in terms of the District 6 campus, Business. Despite this the services as envisaged and offered by the two facilities dedicated to postgraduate students are very similar in approach, in services offered and even in the spaces within as far as these are dedicated functionally. This should not be surprising as both are spaces dedicated to what Xing described as the main goal of the university, even in the fourth industrial revolution, to see that “students’ needs should be met effectively”.

In terms of libraries it is clear that this is achieved by providing the services as determined as being those needed to improve the productivity of the researchers, and also to increase the throughput of postgraduate students. By providing these services in a dedicated space in a way that allows the services to be accessed on need, is a major response, and is not limited to any one kind of academic institution or library, but is merely determined by the type of student. Thus where we find postgraduate students, so we should also find libraries allocating specific space, allowing these dedicated services and meeting these needs effectively.

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